

trates of palladium, and lastly, the double oxalate of palladium and ammonium, are, in like manner, subjected to examination in a detailed series of experiments.

The second section of the paper relates to the compounds of platinum, and comprehends researches on the composition of the protochloride of platinum; on the action of ammonia on biniodide of platinum; and on the action of ammonia on the perchloride of platinum; in which the properties of these substances are detailed and the formulæ expressing their composition deduced.

There was also read, "Magnetic Observations made at Prague for September 1841." By C. Kreil. Communicated by S. Hunter Christie, Esq., M.A., Sec. R.S.

Pursuant to the Notice given from the Chair at the last meeting, a ballot was taken on the question proposed to the Society by the Council, that Mr. William John Bankes, F.R.S., be ejected from the Society: which was decided in the affirmative, and his name was accordingly erased from the Charter-book by the Vice-President in the Chair.

The Society then adjourned over the Easter Recess, to meet again on the 7th of April next.

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April 7, 1842.

WILLIAM THOMAS BRANDE, Esq., V.P. in the Chair.

The following papers were read, viz.—

Meteorological Observations, taken in conformity with the Report drawn up by the Committee of Physics, including Meteorology, for the guidance of the Antarctic Expedition, as also for the fixed Magnetic Observatories, transmitted to the Society by the Lords Commissioners of the Admiralty and the Master-General of the Ordnance, and communicated by the Council, were read; viz.—

1. "Meteorological Observations taken on board H.M. Ship Erebus, for August and September 1841." By Capt. James Clark Ross, R.N., F.R.S., Commander of the Expedition. (*Forms 1 and 2.*)

2. "Meteorological Observations taken by the Niger Expedition, for May, June and July 1841."

3. "Meteorological Observations taken at the Magnetic Observatory, Ross-Bank, Van Diemen's Land, for November and December 1840, and January, February and March 1841." (*Forms 1 and 2.*)

4. "Meteorological Observations taken at the Magnetic Observatory, Cape of Good Hope, for October and November 1841." By F. Eardley Wilmot, Esq., Lieut. in the Royal Artillery. (*Forms 1 and 2.*)

5. "Meteorological Observations taken at the Magnetic Observatory, Toronto, for January, February, March, April and May 1841."

By C. W. Younghusband, Esq., Lieut. in the Royal Artillery. (*Forms 1 and 2.*)

6. "Of the ultimate distribution of the Air-passages, and of the modes of formation of the Air-cells of the Lungs." By William Addison, Esq., F.L.S., Surgeon, Great Malvern. Communicated by R. B. Todd, M.D., F.R.S.

After reciting the various opinions which have prevailed among anatomists regarding the manner in which the bronchial tubes terminate, whether, as some suppose, by cells having free communication with one another, or, as others maintain, by distinct and separate cells having no such intercommunication, the author states that having been engaged in investigating, with the aid of the microscope, the seat and nature of pulmonary tubercles, he could never discover, in the course of his inquiry, any tubes ending in a *cul-de-sac*; but, on the contrary, always saw, in every section that he made, air-cells communicating with each other. He concludes from his experiments and observations, that the bronchial tubes, after dividing dichotomously into a multitude of minute branches, which pursue their course in the cellular interstices of the lobules, terminate, in their interior, in branched air-passages, and in air-cells which freely communicate with one another, and have a closed termination at the boundary of the lobule. The apertures by which these air-cells open into one another are termed by the author *lobular passages*: but he states that the air-cells have not an indiscriminate or general intercommunication throughout the interior of a lobule, and that no anastomoses occur between the interlobular ramifications of the bronchiæ themselves; each branch pursuing its own independent course to its termination in a closed extremity. Several drawings of the microscopical appearances of injected portions of the lungs accompany this paper.

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April 14, 1842.

FRANCIS BAILY, Esq., V.P., in the Chair.

The Rev. Henry Christmas, M.A., was balloted for and duly elected into the Society.

A paper was read, entitled, "Remarks on the probable natural causes of the Epidemic Influenza as experienced at Hull in the year 1833; with a delineation of the Curves of the maximum, the mean, and the minimum Temperatures in the shade, and the maximum Temperature in the sun's rays at Hull, during the years 1823 and 1833." By G. H. Fielding, M.D. Communicated by the Rev. Wm. Buckland, D.D., F.R.S.

The meteorological causes to which the author ascribes the sudden accession of the influenza at Hull, and its continuance from the 26th of April to the 28th of May 1833, are, first, the unusually cold